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Claims

1. An antibody recognizing one of the AChE-R splice variant of acetylcholinesterase and a C-terminal peptide derived therefrom, said C-terminal peptide comprising the I4 peptide, for diagnosing at least one of central nervous system (CNS) stress, disruption of the blood-brain-barrier and Alzheimer's disease.
2. The antibody according to claim 1, wherein the CNS stress is caused by any one of psychological, chemical and physical insult.
3. The antibody according to claim 1, which recognizes said C-terminal peptide.
4. The antibody according to claim 3, wherein the C-terminal peptide has an amino acid sequence as denoted by any one of SEQ ID: No. 1, 2, and 3.
5. The antibody according to claim 4, which is monoclonal.
6. A method for the diagnosis of one of central nervous system (CNS) stress and disruption of the blood-brain-barrier in a mammal, comprising obtaining a sample from said mammal, contacting said sample with an antibody of any one of claims 1 to 5, removing unbound antibody, and detecting the extent of reaction between said antibody and acetylcholinesterase or a fragment thereof present in said sample.
7. A method for the diagnosis of one of central nervous system (CNS) stress and disruption of the blood-brain-barrier in a mammal, comprising contacting a sample of said mammal with an antibody of any one of claims 1 to 5, removing unbound antibody, and detecting the extent of reaction between said antibody and acetylcholinesterase or a fragment thereof present in said sample.
8. The method of any one of claims 6 or 7, wherein the CNS stress is caused by one of physical, chemical and psychological insult.

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9. The method according to claim 8 wherein the physical insult is one of head injury, head trauma and exposure to irradiation.

10. The method according to claim 8, wherein the chemical insult is one of exposure to insecticide and nerve gas.

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11. A method for the diagnosis of Alzheimer's disease in a subject, comprising obtaining a sample from said subject, contacting said sample with an antibody of any one of claims 1 to 5, removing unbound antibody, and detecting the extent of reaction between said antibody and acetylcholinesterase or a fragment thereof present in said sample.

12. A method for the diagnosis of Alzheimer's disease in a subject, comprising contacting a sample of said mammal with an antibody of any one of claims 1 to 5, removing unbound antibody, and detecting the extent of reaction between said antibody and acetylcholinesterase or a fragment thereof present in said sample.

13. A method according to any one of claims 6 to 10, wherein the sample is one of serum and cerebrospinal fluid sample.

14. A method according to any one of claims 11 or 12, wherein the sample is one of serum and cerebrospinal fluid sample.

15. Use of the antibodies of claims 1 to 5, in the diagnosis of one of central nervous system (CNS) stress, Alzheimer's disease and disruption of the blood-brain-barrier in a mammal.